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REMARKS

Please amend the application as follows:

In the claims:

Amend claims 1, 2 and 15 to 20 in the manner shown in the CLAIM AMENDMENTS.

Claims 1 to 22 remain in the application.

Claims 1 and 15 to 20 have been amended to more clearly define the invention and to more explicitly distinguish the invention over the prior art cited by the examiner. Claims 15 to 20 have also been amended to use language conforming to the language used in the specification. Claim 2 has been amended to make the claim properly dependent on claim 1.

The examiner is respectfully requested to reconsider his rejection of claim 1 under 35 U.S.C. 102(b) as being anticipated by US Pat. 6,061,957 to Takashima. Claim 1 now calls for an annular plant support wall to form a generally annular enclosure. This annular wall is said to have an opening therein providing access both to the annular enclosure and to the inner surface of the wall. Pat. '957 does not disclose such a wall. If tube 44 in Fig. 2 of the patent is taken as providing the annular wall, this wall has no opening therein to the interior thereof. If walls 66, 70 and 68 in Fig. 2 of the patent are taken as equivalent to applicant's wall, these walls do not define an annular wall. An annular wall is one formed between inner and outer cylinders and the walls 66, 70, 68 are not cylindrical.

Claim 1 now also calls for mounting means on the inner surface of the annular wall for use in supporting plants within the enclosure. Pat. '957 shows no equivalent structure. Pat. '957 mounts the plants outside of the annular wall of the tube 44 so

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no mounting means are required inside the tube on its inner surface. Since claim 1 has the features of an opening in an annular wall providing access to within the wall, and mounting means on the inner surface of the annular wall, both of which features are not shown in the patent, it is believed that claim 1 is not now anticipated by patent '957 and the rejection under 35 U.S.C. 102(b) in view of this patent should be withdrawn.

Applicant's growing unit provides an annular wall in the center of which, along its longitudinal axis, is a light source. The plants, mounted on the inner surface of the annular wall, all directly face the light source and are generally equidistant from it. In Pat. '957, the plants are mounted outside the tube 44 and all face away from the light source. It is hard to see how light in this patent can pass from the light source to reach the reflector to shine back on the exposed part of the plants since the root bags 98 holding the plants appear to be directly between the light source and the plants. However, if some light can pass by the root bags, a reflector is needed to reflect the light back onto the plants. Applicant's unit, having the plants on the inner surface of the annular wall directly facing the light source is much simpler and more efficient than the unit in Pat. '957.

Applicant's annular wall also has the advantage of protecting the plants since they are inside the wall. In the unit shown in Pat. '957, the plants are outside the annular tube 44 within stalls and a further outside enclosure comprising walls 66, 68 and 70 is needed to provide protection to the plants. Thus the unit in the Pat. '957 is much more complicated in construction than applicant's unit and thus more expensive.

The examiner is also requested to reconsider his rejection of claims 2-5, 10, 11, 15-20 under 35 U.S.C. 103(a) as being

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unpatentable over Pat. '957 in view of JP 401148131A. These claims are all dependent either directly or indirectly on claim 1. claim 1 is believed to patentably distinguish over Pat. '957 applied under 35 U.S.C. 103(a) in calling for an annular wall having an opening therein to provide access to the annular space enclosed by the wall and to provide access to the inner surface of the wall. Pat. '957 does not disclose such a wall. claim 1 also calls mounting means on the inner surface of the annular wall for use in supporting plants on the wall. Pat. '957 does not disclose any mounting means on the inner surface of an annular wall. Applicant's construction faces the plants inwardly toward the light whereas the unit in Pat. '957 faces the plants outwardly away from the light. Since claim 1 calls for features not shown, or even suggested, by Pat. '957, and since claims 2-5, 10, 11, 15-20 are all dependent on claim 1 it is believed that these claims patentably distinguish over the cited art for the same reasons. The rejection of these claims under 35 U.S.C. 103(a) is therefore not well taken and should be withdrawn.

The examiner is further requested to reconsider the rejection of claims 6-9, 12-14 under 35 U.S.C. 103(a) as being unpatentable over Pat. '957 as modified by JP Pat. '131 and further in view of U.S. Pat. 5,228,235. Again, these claims are dependent indirectly on claim 1 and since claim 1 is believed to patentably distinguish over Pat. '957 as applied under 35 U.S.C. 103(a) for the reasons given in the preceding paragraph, claims 6-9, 12-14 are also believed to patentably distinguish thereover.

The examiner is also requested to reconsider his rejection of claims 21, 22 under 35 U.S.C. 103(a) as being unpatentable over '957 as modified by JP Pat. '131 and further in view of U.S. Pat. 3,458,951. Claims 21, 22 are dependent on claim 1 either

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directly or indirectly and since claim 1 is believed to patentably distinguish over Pat. '957 as applied under 35 U.S.C. 103(a) for reasons given in second last preceding paragraph, claims 21, 22 are also believed to patentably distinguish thereover.

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CLAIM AMENDMENTS

1. (Currently amended) A hydroponic growing unit having a base, the outer periphery of the base defined by an outer, vertical base wall, the base shaped to hold liquid; a annular vertical plant support wall forming a generally annular enclosure, the support wall mounted on the base wall to extend above the base and to enclose space above the base, the support wall having a plurality of mounting means on its inner surface for use in mounting growing plants within the enclosure; and a least one opening in the support wall providing access to the enclosed space and to the inner surface of the support wall, the opening normally closed by at least one wall panel forming part of the support wall.

2. (Currently amended) A hydroponic growing unit as claimed in claim 1 wherein the outer periphery of the base is generally circular.

3. (Original) A unit as claimed in claim 1 wherein the base is in the shape of an annular trough, the trough having inner and outer vertical side walls and a bottom wall joining the side walls with the outer side wall of the trough forming the base wall.

4. (Original) A unit as claimed in claim 3 wherein the trough has a well formed therein for collecting the liquid in the trough, the well sized to receive a pump for pumping liquid from the well.

5. (Original) A unit as claimed in claim 3 including a light support extending diametrically across the inner side wall of the trough.

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6. (Original) A unit as claimed in claim 5 including a tubular light means extending up from the middle of the light support, the light means located in the center of the support wall.

7. (Original) A unit as claimed in claim 6 wherein the light means comprises a transparent tube having a light source at each end, and light source support means at each end, the light source support means being open to pass air through the light means.

8. (Original) A unit as claimed in claim 7 including a ventilating fan at the bottom of the tube for drawing air into the tube to heat it and to cool the light sources, the air emerging from the top of the tube into the enclosure to provide heat to the plants growing in the enclosure.

9. (Original) A unit as claimed in claim 7 including a top light support mounted on the top of the support wall and supporting the top end of the tube centrally within the support wall.

10. (Original) A unit as claimed in claim 1 including light means extending up from the middle of the base, the light means located in the center of the support wall.

11. (Original) A unit as claimed in claim 3 including light means extending up from the middle of the base, the light means located in the center of the support wall.

12. (Original) A unit as claimed in claim 11 wherein the light means comprises a transparent tube having a light source at each end, and light source support means at each end, the light source support means being open to pass air through it.

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13. (Original) A unit as claimed in claim 12 including a ventilating fan at the bottom of the tube for drawing air into the tube to heat it and to cool the cool the light sources, the air emerging from the top of the tube into the enclosure to provide heat to the plants growing in the enclosure.

14. (Original) A unit as claimed in claim 12 including a top light support mounted on the top of the support wall and supporting the top end of the tube centrally within the support wall.

15. (Currently amended) A unit as claimed in claim 1 wherein the mounting means mount (support wall, including the wall panel, has) plant growing blocks (support means) arranged about the inner surface of the support wall, the (support) mounting means (in a circle equally spaced apart and) located at the top of the support wall.

16. (Currently amended) A unit as claimed in claim 15 including a watering inlet associated with each mounting (support) means, the watering inlets supported by the top of the support wall and connected via tubing and a pump to the liquid in the base.

17. (Currently amended) A unit as claimed in claim 3 wherein the mounting means mount (support wall, including the wall panel, has) plant growing blocks (support means) arranged about the inner surface of the support wall, the (support) mounting means (in a circle equally spaced apart and) located at the top of the support wall.

18. (Currently amended) A unit as claimed in claim 17 including a watering inlet associated with each mounting (support) means,

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each watering inlet supported by the top of the support wall and connected via tubing, and a pump in the well, to the liquid in the base.

19. (Currently amended) A unit as claimed in claim 15 including a growing block suspended from each block mounting (support) means, the block comprising plant growing material encased in a cover, the block extending generally over the height of the support wall and having an inner surface facing inwardly toward the center of the support wall, the cover on the inner surface having openings providing access to the growing material within the cover, the openings permitting the plants to be planted in the growing material.

20. (Currently amended) A unit as claimed in claim 17 including a growing block suspended from each block mounting (support) means, the block comprising plant growing material encased in a cover, the block extending generally over the height of the support wall and having an inner surface facing inwardly toward the center of the support wall, the cover on the inner surface having openings providing access to the growing material within the cover, the openings permitting the plants to be planted in the growing material.

21. (Original) A unit as claimed in claim 1 wherein the support wall has two diametrically opposed openings therein, each opening closed by two end wall panels, each end wall panel hinged to the support wall, the end wall panels forming part of the support wall when closed.

22. (Original) A unit as claimed in claim 3 wherein the support wall has two diametrically opposed openings therein, each opening

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closed by two end wall panels, each end wall panel hinged to the support wall, the end wall panels forming part of the support wall when closed.